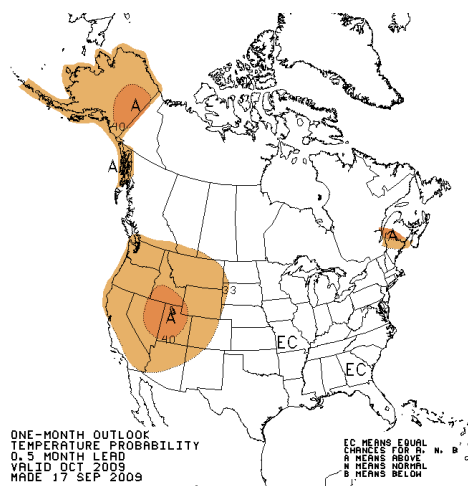


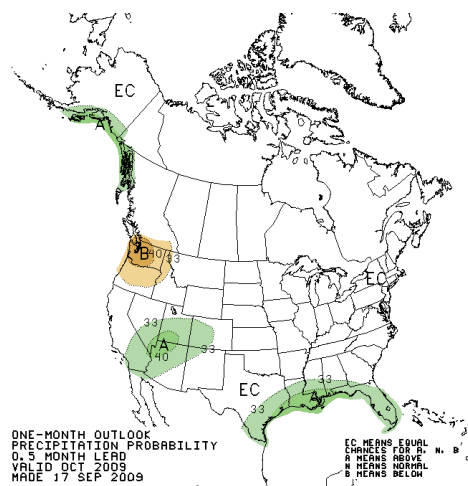
October – December 2009 Temperature and Precipitation Outlooks

Below are the latest official probabilistic outlooks from the Climate Prediction Center (CPC) for October temperatures and precipitation, and the average for the October through December three month period.

OCTOBER 2009 OUTLOOKS

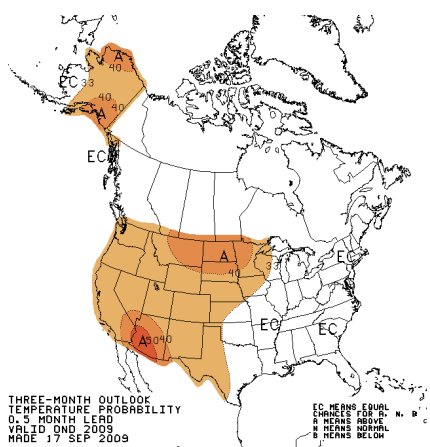


Temperature

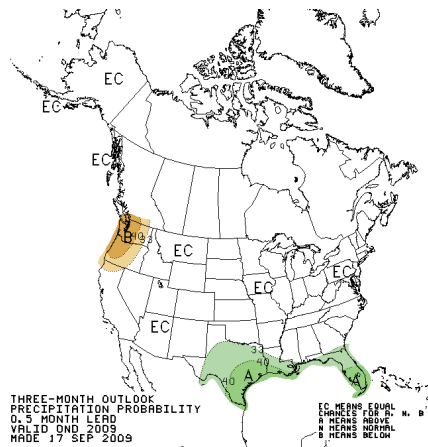


Precipitation

OCTOBER through DECEMBER 2009 OUTLOOKS



Temperature



Precipitation

In the above CPC outlooks for October, there are equal chances (EC) for above normal, normal and below normal temperatures and precipitation for South Dakota and the surrounding portions of Iowa, Minnesota, and Nebraska in the WFO FSD forecast area (33.3 percent chance of any category happening). For the three-month period of October through December, there is an increased chance of above normal temperatures, with continued equal chances for above normal, normal, and below normal precipitation.

The shaded areas on these maps indicate where there is a higher probability of above normal or below normal values. For example, on the October temperature outlook, there is a 40 percent chance of seeing above normal temperatures in Utah and Idaho. There is still a 33 percent chance of normal temperatures, and a 27 percent chance of below normal temperatures in that region.

Experimental WFO FSD Outlooks

The following images show the “best-guess” outlooks developed at WFO FSD. They are based on a combination of the output from multiple neural network programs, comparing observed historical data from years with similar values and trends of multiple climate indices (analogs), and looking at the statistical correlations of several observed climate indices with future observed temperatures and precipitation based on historical data from almost 60 years.

These images are created using the average forecast values from all of the outlook tools, and then plotting which tercile (i.e. 3 category: above, normal, below) the averages fall into for each of 12 climate divisions covering South Dakota, southwest Minnesota, northwest Iowa, and northeast Nebraska. Red is for above normal temperatures, blue is below normal temperatures, green is above normal precipitation, and brown is below normal precipitation

The table that follows below the images gives a breakdown of what percentage of the outlook tools fell into each of the 3 terciles for all of the climate divisions. These percentages are given to relay what level of confidence might be placed on the outlooks.

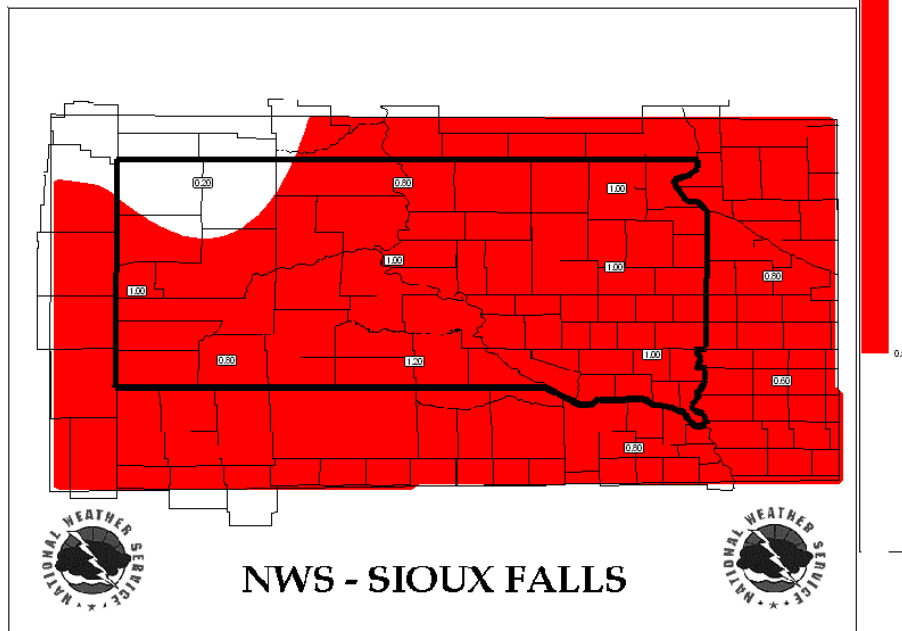
For the Analog tools, it was determined that the following years most closely matched the current values and recent trends of the greatest number of the climate indices that were studied:

1957, 1974, 1977, 1987, 1991, and 2004

DISCLAIMER: WFO FSD is developing local 1 to 3 month outlooks of temperature and precipitation. These outlooks are experimental and still being tested and developed. They are being provided to give more details and a more deterministic outlook for South Dakota and the portions of Minnesota, Iowa, and Nebraska in the FSD forecast area. They are not intended to compete with or replace the official NOAA outlooks issued by the Climate Prediction Center (CPC), which are probabilistic. For more details on how these outlooks are prepared, or if you have any questions concerning these outlooks, please feel free to contact the WFO FSD Climate Services Focal Point [Mike Gillispie](#).

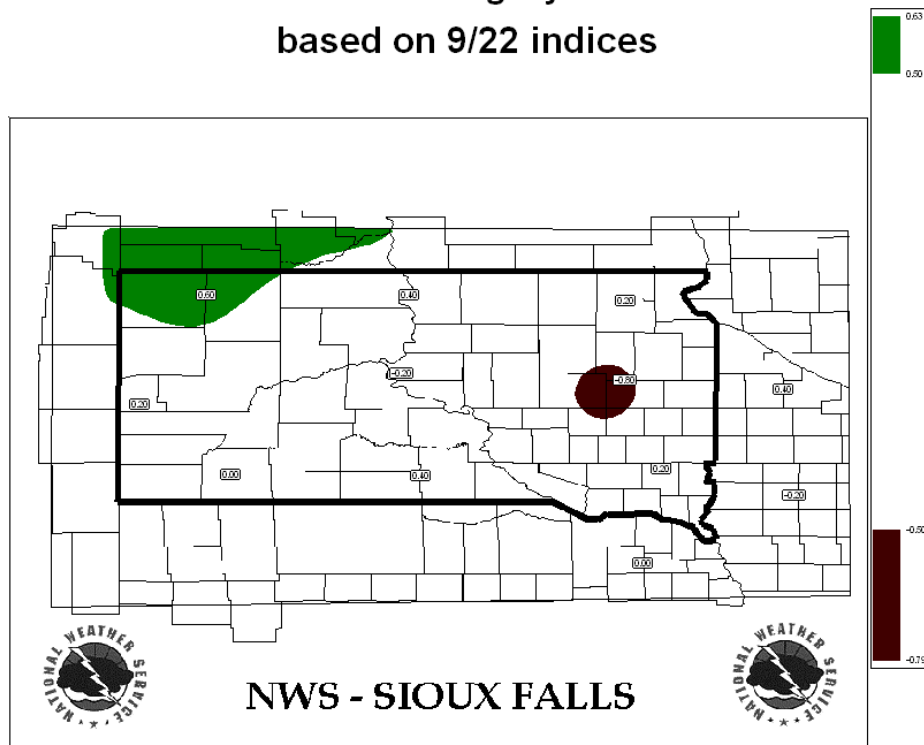
October Temperature Outlook

3-Category
based on 9/22 indices



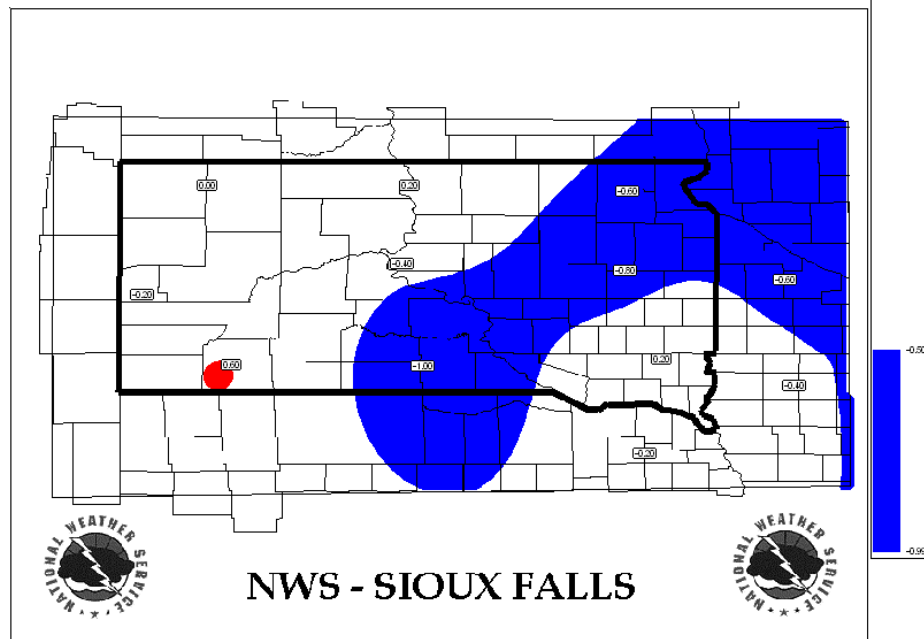
October Precipitation Outlook

3-Category
based on 9/22 indices



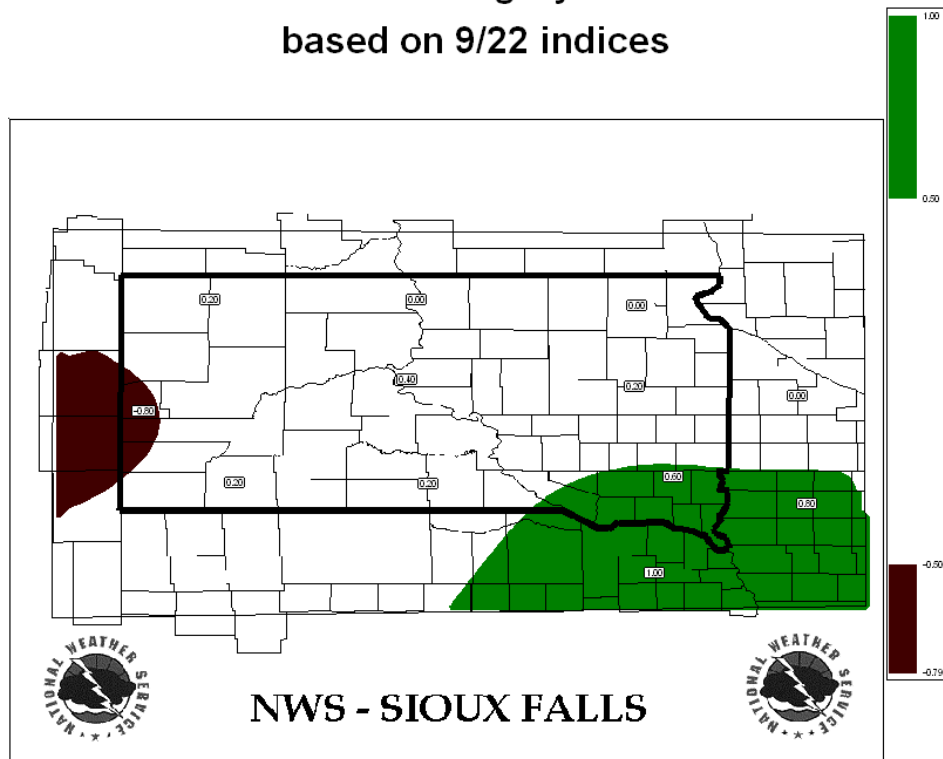
November Temperature Outlook

3-Category
based on 9/22 indices



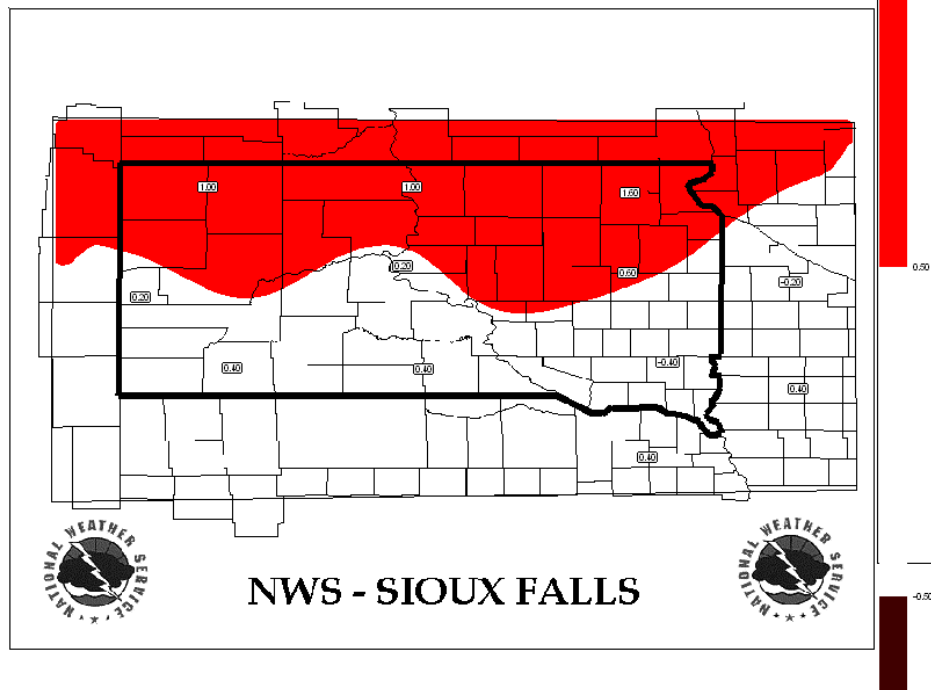
November Precipitation Outlook

3-Category
based on 9/22 indices



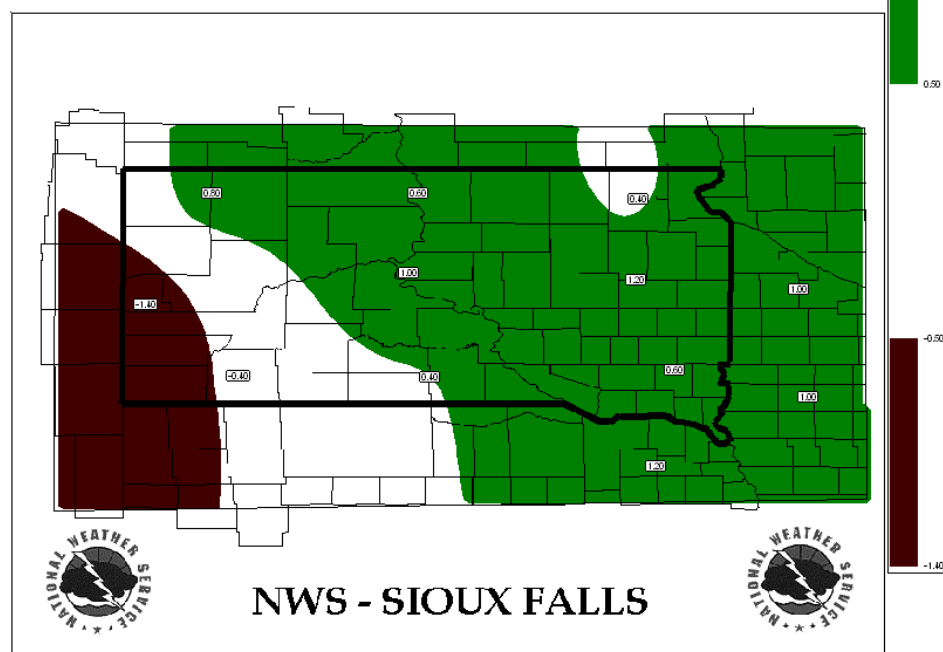
December Temperature Outlook

3-Category
based on 9/22 indices



December Precipitation Outlook

3-Category
based on 9/22 indices



Percent of outlook tools predicting each category

Oct. Temp.	Above	Normal	Below
SDCD1	30	50	20
SDCD2	50	40	10
SDCD3	60	30	10
SDCD4	60	30	10
SDCD5	50	40	10
SDCD6	60	30	10
SDCD7	60	30	10
SDCD8	60	40	0
SDCD9	60	35	5
IACD1	45	35	20
MNCD7	50	40	10
NECD3	40	60	0

Oct. Prec.	Above	Normal	Below
SDCD1	50	30	20
SDCD2	40	40	20
SDCD3	30	50	20
SDCD4	30	50	20
SDCD5	30	40	30
SDCD6	20	50	30
SDCD7	0	60	40
SDCD8	40	40	20
SDCD9	20	70	10
IACD1	10	70	20
MNCD7	30	65	5
NECD3	10	80	10

Nov. Temp.	Above	Normal	Below
SDCD1	40	20	40
SDCD2	40	30	30
SDCD3	10	50	40
SDCD4	30	30	40
SDCD5	50	30	20
SDCD6	20	40	40
SDCD7	10	40	50
SDCD8	0	50	50
SDCD9	20	70	10
IACD1	20	40	40
MNCD7	20	35	45
NECD3	20	50	30

Nov. Prec.	Above	Normal	Below
SDCD1	40	30	30
SDCD2	30	40	30
SDCD3	30	40	30
SDCD4	15	25	60
SDCD5	40	30	30
SDCD6	40	40	20
SDCD7	30	50	20
SDCD8	40	30	30
SDCD9	40	50	10
IACD1	50	40	10
MNCD7	30	40	30
NECD3	70	10	20

Dec. Temp.	Above	Normal	Below
SDCD1	55	35	10
SDCD2	50	50	0
SDCD3	80	20	0
SDCD4	20	70	10
SDCD5	40	40	20
SDCD6	20	70	10
SDCD7	40	50	10
SDCD8	40	40	20
SDCD9	10	60	30
IACD1	40	40	20
MNCD7	20	50	30
NECD3	40	40	20

Dec. Prec.	Above	Normal	Below
SDCD1	60	20	20
SDCD2	50	30	20
SDCD3	50	25	25
SDCD4	10	15	75
SDCD5	25	25	50
SDCD6	55	35	10
SDCD7	60	40	0
SDCD8	30	60	10
SDCD9	50	30	20
IACD1	60	30	10
MNCD7	60	30	10
NECD3	70	20	10

